MASTER GARDENER
UF UNIVERSITY of FLORIDA
IFAS Extension

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Form 10

Florida Master Gardener Awards and Recognition Form
Awards of Excellence

Each county is allowed ***ONE ENTRY PER CATEGORY***. Although your Master Gardener Coordinator may have been heavily involved in this effort, only the efforts of the Master Gardeners themselves are to be evaluated. Points will be deducted if it is perceived that most of the effort or submission of entry forms came from the Master Gardener Coordinator.

Only efforts made since the last awards ceremony will be considered by the judges. Any new or re-certified active Florida Master Gardener(s) are eligible. In the event your entry does **not** take top honors in this category this year, we would encourage you to improve your submission and resubmit your entry next year should you *repeat or continue* this project. If your project has won in **ANY** year, it **CANNOT BE RE-ENTERED** again, despite any significant changes in format or participants.

Judges for the awards shall be appointed by the State Master Gardener Program Leader, University of Florida. Decisions by the judges will be final.

ALL APPLICATIONS MUST BE SUBMITTED IN ELECTRONIC FORMAT

SEE BELOW FOR APPLICATION CRITERIA:

The correct and completed award application forms including:

- A typed application form not to exceed 3 pages in length. Supporting materials (where requested may be additional pages)
  - The three pages must include the 150 word project summary.
- 12 point font
- No more than 8 photographs in addition to the three pages of text. (Photos no larger than 8 x 10)
- This form typed and completed including: appropriate category checked
- Name of MG Coordinator (The coordinator must approve application prior to admission)
- Application, photos and supporting materials must all be in PDF format and packaged into one document. Submissions are to be emailed to: twichman@ufl.edu

County: Marion

Name of Project: Outstanding Master Gardener

Project start date: 2008 Project end date: Ongoin

Name of person(s) typing application: Linda Krausnick

Name or names of Master Gardeners preparing application: Linda Krausnick

Name of Agent: Norma Samuel

CATEGORY: **Indicate only one category per entry form.** *You must assign your entry to a specific category to be considered for an award in that category.* **Entries are limited to the categories indicated below.**

___ Form 11 Beautification
___ Form 12 Demonstration Garden
___ Form 13 Educational Materials Development
___ Form 14 Extension Awareness
___ Form 15 County Displays/Exhibits

___ Form 16 General Achievement
X Form 17 Outstanding Master Gardener

___ Form 18 Personal Communications
___ Form 19 Service to 4-H and other youth
___ Form 20 Special Audiences
___ Form 22 Written or Verbal Mass Comm.
___ Form 23 County Master Gardener Newsletter

Email PDF Applications to: Tom Wichman
twichman@ufl.edu

TO BE ELIGIBLE ALL ENTRIES MUST BE RECEIVED BY **AUGUST 19, 2013**

MG State Award Application 2013

1. Areas of Participation

I am member of the class of 2008 and have contributed a total of 4,700 hours, 500 of which are educational hours.
From 2008 to 2013 I have been involved in the following:

- Member of the Board of Directors since 2011
- Propagation Committee – Greenhouse and Nursery
- Educational Outreach/Public Education Presentations
- New Master Gardener training
- Master Gardener Plant Clinic
- 4-H Seminole Vegetable Garden Project judge
- Hosted four Master Gardener Garden Tours
- MG VMS photo journalist (Albums)
- Attended Florida Nursery Growers and Landscape Association (FNGLA) course in 2009 to become a Florida Certified Horticultural Professional. Certification was renewed in 2012.
- Small Farms Extension Advisory Committee
- Awards: 2009 Marion County Master Gardener of the Year; 2010 State Master Gardener Award for Communication; 2011 Marion County Outstanding Master Gardener of the year; 2013 - Presidential Award for Volunteer Service.
- Attendance at every state Master Gardener Conference since 2008.

2. Description of Projects

Propagation/Nursery

Our propagation committee operates on a ½ acre site which includes a greenhouse and outdoor nursery. As director of that committee my goal has been to create an environment for Master Gardeners (MGs) that is inviting while offering an opportunity for hands-on experience in all aspects of nursery operation. 2012 saw the culmination of a three-year upgrade of our propagation area which I initiated, planned and executed with the help of other MG volunteers and a willing and talented spouse. The greenhouse space which had become 75% nonfunctional was reconfigured. Tables were disassembled and reassembled to allow for easier access, a sink and dry well was installed, a potting bench and counter was added, 50 gallon water barrels provide passive solar heat in the winter, and three ebb and flow plants tables were built. In addition plant tables were built for the nursery area and the overhead irrigation system was converted to a more efficient micro-irrigation system, a system which has become an educational model for MGs as well as the general public. These upgrades were necessary to reduce hours spent in this project while increasing the quality of plants sold at fundraisers.

I have designed educational materials which include laminated instruction sheets for such procedures as planting seeds and cuttings, identifying and controlling insects and diseases, potting up, and the operation of the irrigation system. In January of 2013 I began publishing This Week in Propagation educational bytes that are shared weekly via email with all Marion County Master Gardeners. I arranged two educational field trips, one to the MG greenhouse in Lake County and one to the greenhouse at Central Florida College in Ocala.

This spring we grew in our greenhouse 1,200 tomato plants, 400 pepper plants and 100 herbs for 2013 Marion County (MC) MG Spring Festival attendee survey incentive and the youth activities program. In addition tomatoes and peppers were donated to 4-H for the Seminole Vegetable Garden Project (30 gardens) and the Empower Ocala Garden project. We also grow annuals, perennials, shrubs, and trees for two yearly MG plant sale fundraisers. Through our MG plant sales we have helped homeowners one on one to rethink the way they plan their landscapes. Our plant sales feature MG customer assistants who can advise customers on the best plants for their needs, and as a result of my influence we have come to heavily support a growing customer interest in butterfly, bee, and hummingbird gardening.
My role as Director of Propagation includes budgeting and purchasing, building a detailed propagation operation manual, running workshops on propagation for the Florida 101 lecture series, and a Methods of Propagation training segment as part of the yearly new Master Gardener training classes. I have recently recruited a Master Gardener who shares my passion for nursery operation to be an intern who I will train for a one year to take over my position at the end of 2014.

Educational Outreach

I have presented talks on the following topics:

➢ Florida Gardening 101 Series, Spring and Fall (4 times)	*Methods of Propagation (120 contacts)*
➢ Marion County MG Spring Festival (3)	*Composting 101 (135)*
➢ Vegetable Garden Expo(2)	*Composting 101 (110)*
➢ Speakers Bureau (1)	*Square Foot Gardening, Composting (12)*
➢ New Master Gardener Training (7)	*Methods of Propagation (40),* *Composting 101_(40)* *Plant Clinic Training (40)*
➢ Tuesday Morning Series(1)	*Composting 101(8)*
➢ 2013 MG Spring Plant Sale	*Let's Talk Plants (Recommendations from Personal Experience) (25)*
➢ 2013 Farm Bureau Legislative Tour Guide	Guided tour of demonstration gardens *(60)*
➢ Ask-The-Expert Booths at Wal-Mart & Home Depot (3)	Fertilizer/general garden questions *(84)*

Plant Clinic (Appointed Director Spring 2013)

I volunteer between of 8 to 12 shifts a month in the MG plant clinic. I also answer emails that come through the MG link on the Marion County website. Since assuming the directorship I have:

- Created educational materials including 11 x 17 laminated Fertilizer and Pesticide Quick Reference Cards.
- Coordinated the reorganization and updating of our ***Question and Answer Book*** enlisting the help of plant clinic volunteers.
- Started sending ***Plant Clinic Memo*** emails to MGs highlighting interesting and unusual problems presented to us by our clientele.
- Established and printed a protocol for answering clientele calls – currently being used in the Plant Clinic and will be taught to the incoming MG class. This protocol includes follow up emails sent to clientele that include links to UF/IFAS and other land grant university websites that support and enhance volunteer responses to clientele inquiries.
- Created an electronic signature for each email sent from the plant clinic that includes links to UF/IFAS websites, the address and telephone number of UF/IFAS Extension Marion County office and reference to the Marion County MG Facebook page.

My goal in the plant clinic has been to update our reference materials to reflect Florida-Friendly Landscaping™ practices in the home landscape. This has involved reorganizing of some UF materials to be more user-friendly to homeowners. The printed protocol cards by each plant clinic phone give volunteers a method for conducting phone calls that includes how to research and organize information and send follow up email with links to UF/IFAS documents.

4-H Seminole Vegetable Garden Project Judge

Judged home and school gardens (20 x 26 foot plots) in 2010, 2011, 2013 approximately 30 vegetable gardens each year (over 3 days) located all around Marion County.

3. Methods of Evaluation

Projects were evaluated through written and or verbal feedback, and observations. Following is a list of some of the sessions that were formally evaluated. (See attached PDFs)

Gardening 101 – Propagation 101 – Evaluation Summary
Survey Results Spring Sale 2013
Spring Festival - Composting 101
MG Training Class Feedback

Plant Clinic & Ask-The-Expert Booth Events

For one on one contact the measurement of impact is necessarily subjective. Listening attentively, repeating back the client's concerns, and thoroughly researching and answering questions to the satisfaction of the client are components of a quality exchange that maximizes the potential for impact. In the case of the Ask-The-Expert Booths (84 contacts), simply placing an extension business card in the contact's hand and telling him/her about the MG Plant Clinic is a first step in raising awareness of the work we do.

4. Educational Impact

Propagation/Greenhouse

The feedback received from MGs has been very positive and have been the most satisfying to me personally. These include: Master Gardeners' expressions of appreciation for my communication and organizational skills as they have been applied to the renovation of our nursery and greenhouse, coordination of plant sales, providing opportunities for hands on learning, and my ***This Week in Propagation*** emails. I attribute an increase in participation in propagation from each new class over the past three years and the continuing and enthusiastic support from all our Master Gardeners for our semi-annual sales to be proof of the impact of the my efforts.

Plant Sale Survey: (84 Contacts Responding)

Of the 84 surveys completed by customers at our 2013 spring sale 70% indicated that they were shopping for butterfly, hummingbird, and pollinator plants. For the past three years our sales of these plants have increased over the previous year and this year we sold out. 40% of our customer traveled between 10 and 20 miles and 23% traveled further than 20 miles to attend our sale. 62% found the quality of our plants to be excellent and 34% rated them as good.

Conclusions drawn from the survey: Efforts to raise the level of awareness among homeowners of the importance of providing habitats and food sources for butterflies, hummingbirds, and pollinators by making these plants available to them and by providing additional educational materials have been successful.

Plant Clinic: (Approximately 18 contacts per week, many with UF/IFAS links via email follow up)

The ability to inspire change is a big part in any educational process. MGs often petition homeowners to change long standing attitudes and behaviors regarding their home landscape practices. From what I've observed about myself and others is that change requires inspiration. Results require education. As MGs we need to provide both. When I explain to a caller why her squash are shriveling and dying, why bees are important in the vegetable garden, and why pesticides that are toxic to bees should never be applied to plants that require pollination, I've shared with that person the gift of knowledge. The quality of that exchange is how I measure the success of those encounters.

Educational Outreach (674 Contacts)

The attached program evaluations produced positive results.

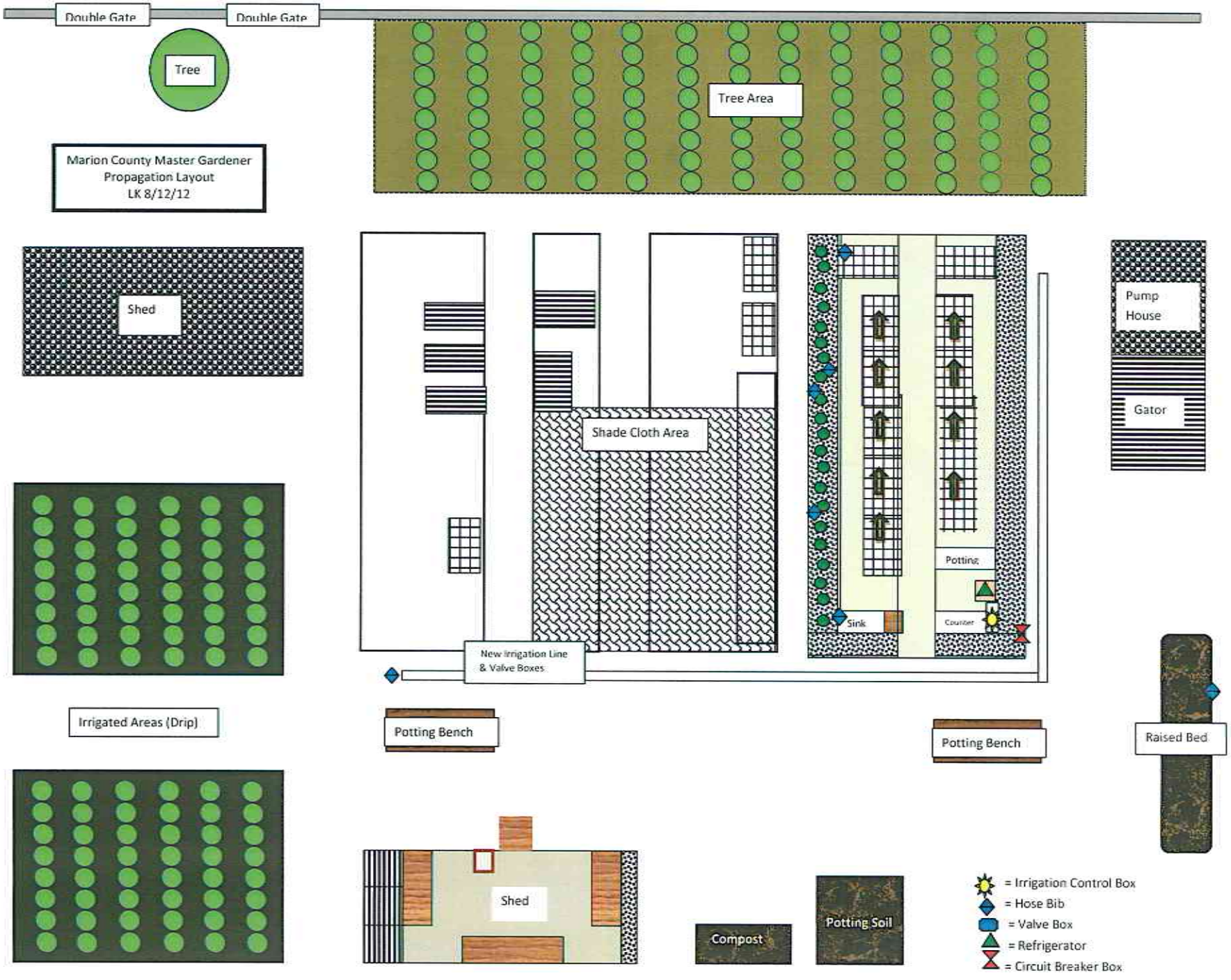
Florida Gardening 101 - Propagation – 93% of participants rated the presentation as excellent (62%) or good (31%).

Master Gardener Spring Festival – Composting 101 – 100% of participants said they gained useful knowledge 92% said that they would share that information with others.

Evaluations from the 2012 MG Training Class – All comments fell in the **Excellent to Good** range.

5. Summary

I'm a natural born multi-tasker and as such I've been involved in many aspects of the MG program. I believe in starting at the grass roots level and working the way up learning the whole operation along the way. I believe that education tempered by experience is the strongest foundation for leadership. With this approach I bring to the MG organization the ability to see the big picture, break out areas of need, generate ideas, and then reintegrate those solutions into the overall functioning of the group. I have demonstrated this approach in my assignments as director of the MG Propagation Committee and as Director of MG Plant Clinic. In my involvement with MG training it is my belief it is the job of every MG to welcome new MG trainees to the organization, support their development and pave the way for them to become future leaders within the organization.


Double Gate
Double Gate
Tree
Tree Area
Marion County Master Gardener
Propagation Layout
LK 8/12/12
Shed
Shade Cloth Area
Pump
House
Gator
Potting
Sink
Counter
New Irrigation Line
& Valve Boxes
Irrigated Areas (Drip)
Potting Bench
Potting Bench
Raised Bed
Shed
Compost
Potting Soil
= Irrigation Control Box
= Hose Bib
= Valve Box
= Refrigerator
= Circuit Breaker Box

Greenhouse Prior to Renovations

Greenhouse Spring 2013

Tomato Starts 2013

Linda Krausnick – 2013 Spring Plants Sale – *Let's Talk Plants*

Propagation Work Day

Hosted Garden Tour - *Any day spent in the garden with friends is a good day!*

Garden Tour

MG Photo Journalist – Spring Festival 2013 – Keepers at the gate!

This Week in Propagation - 4/4/13

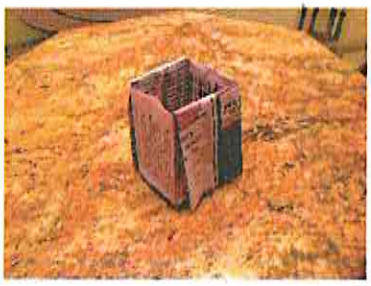
Field Trip!!!

Hi All,

For the past three years volunteer seedlings from my garden have been potted up for our MG spring sale. This year there's a bumper crop and I'm inviting up to 8 propagation committee volunteers to help out with this ritual. We will meet by the pavilion next to the greenhouse this Thursday at 8:45 for a 9:00 a.m. van departure to 1910 SW 30th Court (4 ½ miles from the ag. center) to dig, pot and label. This field trip is limited to 8 propagation committee volunteers. Please sign up on the V.M.S. if you would like to participate. There will still be other projects back at the ag. center for those who don't come on the field trip. There are lots of cuttings to be potted up from the misting bench as well as zinnia seedlings that are begging for larger pots.

How to Make Origami Newspaper Seedling Pots

(Click on the Picture for the Web Page) disabled



This is one origami project we can all handle. It takes some concentration for the first one, but it gets easier. I found that stapling down the 2 outside flaps made the finished pot more stable. Try it out!

Greenhouse Report

Remember the spider mite infestation? The hardest hit plants were the Blue Butterfly Clerodendrum. Even though the mites were eventually eliminated these poor plants didn't seem to be recovering from the damage and resulting disease they suffered. In a last ditch attempt to save them they were cut back to ½ " sticks and sprayed one last time. Within two weeks they started to show specks of green. While three were lost, eighteen survived and are now standing a foot tall and loaded with healthy green leaves. I guess successful outcomes sometimes require drastic measures.

Clerodendrum ugandense

UF UNIVERSITY of FLORIDA

Marion County FLORIDA

This Week in Propagation 5/2/13

The Countdown

Thank you to everyone who signed up on the V.M.S. to work the MG spring plant sale. Only 12 more days 'til sale day... It's time for the finishing touches. Barb usually sets up the individual plant signs and we need someone to coordinate/organize that project while she is on leave. Please email for details if you are interested. There are still a few more volunteers needed to help out with traffic control and assist at the FYN table. This Thursday we will do our final weeding, put all our stock in order, check all pots for tags, and do a safety check of the sales area.

The Plan

Set up will begin on Friday, May 10 at 9 a.m. In a separate email you will find a diagram that illustrates the layout of the parking area, information tents, 4-H pick up area, plant holding area, and the cashiers table. Please note that customers will enter through the double gates on the north end of the fence and exit by the single gate closest to the pavilion.

All volunteers need to arrive by 8 a.m. on the day of the sale. Please park in the lot to the east of the auditorium. There will be a customer information presentation beginning at 8 a.m. and the sale will officially begin at 8:30 and run until 1 p.m. All volunteers are asked to wear their green, collared, MG shirts (other colors are acceptable, but green is preferred) and name tags. There will be a volunteer sign in/out sheet inside the greenhouse on the counter on the right as you enter on both days. There will be at least two inventory lists posted in the main aisle of the plant area for MG customer assistants to use as reference. Lunch (subs, chips, soda and cookies) will be served when the sale is over and water will be available throughout the morning. Please feel free to email with any questions.

UF UNIVERSITY of FLORIDA
IFAS Extension

Marion County FLORIDA

COMPOSTING 101

LINDA KRAUSNICK FCHP
MARION COUNTY MASTER GARDENER

Compost Gardening

UF UNIVERSITY of FLORIDA IFAS Extension

Marion County FLORIDA

Tilth:

A soil that drains well, does not crust, takes in water rapidly, and does not make clods is said to have good tilth.

Sustainable Soil Management Soil System Guide
http://www.soilandhealth.org/01aglibrary/010117attrasoilmanual/010117attra.html#tilth

COMPOSITION OF SOIL

45% mineral
25% water
25% air
5% organic matter

THE BASIC ELEMENTS OF COMPOSTING

Green Stuff + Brown Stuff

+  +  +  (Hint = Microbes)

Over  = COMPOST

Tilth:

The state of a soil with respect to the suitability of its particle size and structure for growing crops

Merriam Webster: http://www.wordcentral.com/cgi-bin/student?book=Student&va=tilth

THE PROCESS IS THE SAME BUT METHODS CAN DIFFER

Enclosed Bin
Grow Heap (Book p. 163)
Spot Compost (Book p. 160)
Lasagna/Comforter (Raised Bed)
Mulch Turned Compost
Underground (See composting book p. 172)

COMPOST ENCLOSURES



TUMBLER STYLE

WOOD PALLETS

PORTABLE DOG PEN

CONCRETE BLOCK

THREE BIN SYSTEM

WILD LIFE PILE

COMFORTER COMPOSTING

THIS MULCH WILL TURN TO COMPOST AND FEED THE NEXT GENERATION OF CROPS.

PLACEMENT: LOCATION MATTERS

In a convenient spot
On level ground
On well-drained soil
Away from direct sunlight
Protected from wind
Near water source

LEAF PILE COMPOST

INGREDIENTS

Green Stuff (Nitrogen Rich)

Grass Clippings
Vegetable/Fruit Peels
Garden Debris
Cow, Chicken, Rabbit, Pigeon Manure
Coffee Grounds, Tea Bags, Egg Shells
Weeds (before seeds develop)

PLUS

Brown Stuff (Carbon Rich)

Dried Leaves, Dead Plants/Flowers
Shredded Cardboard & Newspaper
Sawdust, Straw, Hay, Corn Stalks
Peanut Shells, Pine Needles
Hair, Fur, Wood, Cotton Scraps
Ash - No Charcoal/Coal
Soil (provides microbes)*

DECOMPOSERS (THE COMPOSTING WORKHORSES)

Macro-organisms
do their work when the pile is cool.

Mites, millipedes, springtails, flies, spiders, ants, snails, slugs, earth worms, nematodes, termites beetles, those big ugly roaches.

(Chew, tear, grind large pieces into smaller particles)

GREENS AND BROWNS

Any organic matter that has a C:N ratio smaller than 30 parts Carbon:1 part Nitrogen is considered a GREEN. (25, 20, 15:1= a green)

Any organic matter that has a C:N ratio larger than 30 parts Carbon:1 part Nitrogen is considered a BROWN. (35, 40, 45:1 = a brown)

THE NEXT SHIFT

Micro-organisms
The Fungi and Bacteria

Carbon in fallen leaves or woodier wastes serve as an energy source for these microbial composters

Nitrogen in the greener materials provides them with the raw element of protein to build their bodies.

Micro-organisms can only utilize organic molecules that are dissolved in water.

The energy released as the micro-organisms utilize (digest/oxidize) the carbon creates heat.

Adequate moisture is essential for microbial activity that results in rapid (hot) composting.

NITROGEN TO CARBON RATIOS

A mix of compostable materials
that is in the range of

1 part Nitrogen to

10-30 parts Carbon =

will facilitate the most efficient decomposition.

THE IMPORTANCE OF AIR

Aerobic bacteria require oxygen levels greater than five percent. They are the preferred organisms, because they provide the most rapid and effective composting.

Aerobic bacterial also excrete plant nutrients such as Nitrogen, Phosphorus, and Magnesium.

University of Illinois Extension
http://web.extension.illinois.edu/homecompost/science.html

GETTING STARTED

- Begin with approximately 6 inches of leaves or pine needles.
- Add 2-3" of greens mixing the brown and green slightly. Note: The smaller the particles the faster the composting process will progress.
- Sprinkle some soil or mature compost over the mixture to add microbes
- .
- Moisten (do not soak) each layer.
- The compost pile should be kept moist but never wet. As it decomposes test it by squeezing a handful of compost. It should hold its form but not be dripping water. Covering the pile will protect it from soaking rains.

COMPOSTING TIPS

Too much Carbon slows down decomposition – add Greens

Too much Nitrogen will cause compost to smell – Add Browns

Adding lime can help reduce odor.

Use your compost for:
mulch, amending the soil, compost tea

- Continue layering 2-3" of green stuff with 2-3" of brown stuff, water to moisten and a sprinkling of soil until bin is full.
- Turning will help aerate the pile but isn't essential.
- When the compost is "cooking" the center of the pile should reach 130 - 140 degrees for several days to kill weed seeds
- .
- Temperatures exceeding 149 degrees will kill beneficial microbes A long-stemmed compost thermometer can be used to monitor temperature.
- If the compost temperature is too low mixing in more greens will heat it up. If it is too hot mixing in more browns will cool it down. Turning will also release some of the heat.

About Temperature

When the compost is "cooking" the center of the pile should reach 130 - 140 degrees for several days to kill weed seeds.

Temperatures exceeding 149 degrees will kill beneficial microbes. A long-stemmed compost thermometer can be used to monitor temperature.

Do not use:

- Diseased Plants
- Weeds with seeds - Tomatoes will re-seed in your compost bin
- Any animal product - Meat, Cheese, Fat, Bones, Milk, Grease
- Any Manure from a meat-eating animal
- Vegetation treated with pesticides or herbicides for **vegetable garden composting**
- Charcoal/Coal Ash - Black Walnut Tree Leaves

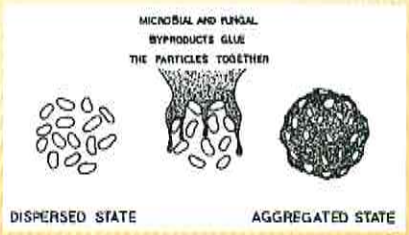
Temperature Fixes

If the compost temperature is too low mixing in more greens will heat it up.

If it is too hot mixing in more browns will cool it down.

Turning will also release some of the heat.

REMEMBER TILTH?



WWW.SOILANDHEALTH.ORG/01AGLIBRARY/010117ATTRASOILMANUAL/010117ATTRA.HTML#TILTH

PERMACULTURE

Bill Mollison

Permaculture — from permanent and agriculture — is an integrated design philosophy that encompasses gardening, architecture, horticulture, ecology, even money management and community design. The basic approach is to create sustainable systems that provide for their own needs and recycle their waste.

The overall aim of permaculture design is to produce an efficient low-maintenance productive integration of plants, animals, structures & man; with the ultimate result of on-site stability & food self-sufficiency in the smallest practical area.

MANAGING THE BIN SYSTEM

1. RULE OF THUMB
2. NO WEEDS WITH SEEDS

CARBON/NITROGEN RECYCLING SUSTAINS THIS LANDSCAPE

Fresh
Oak
Leaves

C:N=26:1

CAUTION: AMINOPYRALID

A HERBICIDE

Aminopyralid is an herbicide used to control pasture weeds. It readily passes through livestock and, although it has no effect on the animal, it can impact land planted with, or land that will be planted with sensitive broadleaf crops.

If hay or grass is treated with an aminopyralid product, herbicide residue can show up in urine and manure, possibly at a level than can injure crops like soybeans, cotton, tobacco, sunflowers, grapes, peanuts, potatoes, tomatoes, strawberries, alfalfa and cucurbits.

AMINOPYRALID CAUTIONS TO SELLERS

When selling treated hay or grass or manure for composting, take the time to **clearly inform buyers** about the label use precautions and restrictions involving treated hay or manure from animals grazing treated pastures or feeding on hay from areas treated with aminopyralid.

For more information visit:
www.aminopyralidstewardshipinstructions.com

REFERENCES & CREDITS

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Turf Fertilizer Basics

Macronutrients - Necessary for optimal growth

N - Nitrogen - Growth and maturation
P - Phosphorus* - Blooming and root development
K - Potassium - Fruit quality and stress tolerance

*Phosphorus is not a requirement for turf grass grown on Florida's phosphorus-rich soil. When fertilizing turf, the University of Florida recommends a fertilizer with zero percent phosphorus (P).

Secondary Nutrients

Ca - Calcium*
Mg - Magnesium*
S - Sulphur*

*Florida's sandy soils and heavy rainfall may precipitate the leaching of these elements.

Micronutrients

Boron, chlorine, cobalt, copper, iron, magnesium, manganese, molybdenum, nickel and zinc.

Fertilizer Types

Water Soluble - Mixed with water/fast acting/frequent applications.

Granular* - Applied dry/watered in.

*Quick Release (Soluble)
(lasts 3 - 4 weeks)

*Slow Release (Insoluble)
Sulfur Coated (lasts up to 8 weeks)
Polymer Coated (lasts up to 6-8 months)

Organic - Carbon based - feeds beneficial microbes and improves soil.

Soil Testing is Key

Soil pH is one of the most important soil properties that affects the availability of nutrients.

- ✓ Marion County UF/IFAS Master Gardeners - Free pH soil test - second Thursday of each month.
- ✓ University of Florida pH testing plus soil analysis (essential elements). Fee: $7
- ✓ Kits available at Marion County UF/IFAS Extension Service - 2232 NE Jacksonville Road - 352-671-8400

For more information, contact:
Marion County UF/IFAS Extension Service
352-671-8400 www.marioncountyfl.org/

UF UNIVERSITY of FLORIDA IFAS Extension

Marion County FLORIDA

Marion County Ordinance for Florida Friendly Fertilizer Use on Urban Landscapes (Ord. No. 08-35, § 1, 11-4-08)

Nitrogen shall not be applied at an application rate greater than 0.7 pounds of readily available nitrogen per one thousand (1,000) square feet at any one time based on the soluble fraction of formulated fertilizer, with no more than one pound total nitrogen per one thousand (1,000) square feet applied at any one time.

The Fertilizer Label

BRAND NAME
GRADE X-X-X

Guaranteed Analysis

_____Total Nitrogen (N)
_____% Nitrate Nitrogen
_____% Ammoniacal Nitrogen
_____% Water Soluble Nitrogen
_____% Urea Nitrogen
_____% Water Insoluble Nitrogen

_____Available Phosphate (P205)

_____Soluble Potash (K20)

_____Chlorine, (Cl) (%Not More Than)

_____% Total Magnesium as(Mg)
_____% Water Soluble Magnesium as (Mg)
_____% Chelated Magnesium (Mg)
_____% Total Manganese as (Mn)
_____% Water Soluble Manganese as (Mn)
_____% Chelated Manganese as (Mn)
_____% Total Copper as (Cu)
_____% Water Soluble Copper as (Cu)
_____% Chelated Copper as (Cu)
_____% Total Iron as (Fe)
_____% Water Soluble Iron as (Fe)
_____% Chelated Iron as (Fe)
_____% Total Zinc as (Zn)
_____% Water Soluble Zinc as (Zn)
_____% Chelated Zinc as (Zn)
_____% Combined Sulfur as (S)
_____% Free Sulfur as (S)

Derived from: (Actual materials and in forms used in the fertilizer mixture, e.g., Di-ammonium Phosphate, Urea, Potassium Chloride, Magnesium)

50 Pound Bag of 16% (N) - 0% (P) - 8% (K)

Calculate pounds of nutrients in the bag:

16% N (.16) x 50 = 8 pounds Nitrogen (N)

Calculate the amount of fertilizer to apply one pound (per application) of N to 1,000 square feet:

50 pounds of fertilizer divided by 8 pounds of N =
6.25 pounds of fertilizer per 1,000 square feet to apply 1 pound of (N)

Therefore, the 8 pounds of N (in 50 pounds of 16-0-8) will cover 8,000 square feet of lawn at the application rate of 6.25 pounds of fertilizer per 1,000 square feet (8 x 1,000 = 8,000).

*Remember! When fertilizing your lawn:

- ✓**The University of Florida recommends using a fertilizer with 0% Phosphorus (P).**
- ✓**Fertilizer should contain both soluble and insoluble Nitrogen.**
- ✓**Do not apply fertilizer unless turf is actively growing.**
- ✓**Do not apply fertilizer before a predicted heavy rain event.**
- ✓**Sweep up fertilizer spills from paved or other nonporous surfaces and return to bag.**
- ✓**Leave a 15-foot minimum fertilizer-free zone around water bodies.**
- ✓**Irrigate with approximately ¼ inch of water.**

lk 5/28/13

Pesticides (by Class)

Caution
Safer Options

Horticultural Oils

- Kills by suffocation.
- Multiple repeat applications may be necessary.
- No residual effects.
- May cause sunburn if applied at higher that recommended temperatures. Refer to label instructions.

Treats: Most effective against small, immobile or slow-moving, soft-bodied insects (aphids, scale, leafhopper nymphs, white flies).

Insecticidal Soaps

- Made from the salts of fatty acids found in the fat and oils of animals and plants. Kills by cracking ekoskeleton.
- Not effective on hard-bodied insects.
- Some plants may be sensitive to soaps and suffer leaf burn, especially those with hairy leaves. When in doubt, test first.

Treats: Soft bodied insects (aphids, some scales, psyllids, whiteflies, mealy bugs, thrips and spider mites.)

Botanical Insecticides

Pyrethroids

- Derived from pyrethrin daisy (plant based) and chemically enhanced.
- Bifenthrin (Talstar), plus many ending in "thrin."
- Acts on nervous system.
- Not compatible with biological controls. (Kills them!)
- No systemic activity. (Not taken up by plant)
- HIGHLY TOXIC TO FISH AND AQUATIC ORGANISMS.
- MOST TOXIC TO BEES
- Mildly toxic to mammals and birds.

Treats: Broad spectrum of activity (kills good and bad insects).

Neem Oil

- Reduces insect feeding/acts as a repellent.
- Relatively non toxic to birds, mammals, bees.
- Slightly toxic to fish and aquatic organisms.
- Rapidly breaks down in soil/in water/on plants.

Treats: Broad spectrum fungicide, miticide, insecticide.

Microbials

- Contain microorganisms (viruses, bacteria, fungi, protozoa, or nematodes) or their by-products.
- Toxicity to non target animals and humans is extremely low.

BT

- Bacillus thuringiensis var. Kurstaki (Btk) - leaf-feeding caterpillars
- Bacillus thuringiensis var. Israelensis (Bti) - kills mosquito, black fly, and fungus gnat larvae
- Bacillus thuringiensis var. Tenebrionis (Btt) -
- products are toxic to certain beetles
- Controls: Colorado potato beetle and elm leaf beetle adults and larvae.

Spinosad

Conserve SC, Entrust (approved for use on USDA certified organic produce)

- Derived from naturally-occurring, soil-dwelling bacterium
- Does not significantly affect beneficial organisms
- Toxic to bees until dry, then much less toxic
- Slightly toxic to birds
- Moderately toxic to fish
- Slightly to moderately toxic to aquatic vertebrates

Treats: fruit flies, caterpillars, thrips, sawflies, spider mites, fire ants, leaf beetle larvae, leaf miner.

Carbamates

Carbaryl (Sevin and several trade names)

- Acts on nervous system.
- Not as environmentally persistent as Organophosphates.
- Landscape/nursery pest management.
- Broad spectrum/especially impacts chewing insects.
- Kills beneficials/pollinators (HIGHLY TOXIC TO BEES).

Treats: Ants, apple aphid, armyworm, azalea leaf miner, bag worms, birch leaf miner, cutworms, fuller rose beetle, grasshoppers, Japanese beetles, aphids, elm leaf beetle, cicadas, blister beetles, leafhoppers, mealy bugs, rose aphid, rose chafer scale insects, tent caterpillar,webworms and many other chewing insects.

Neonicotinoids

Imidocloprid (homeowners) and others, (Merit/Marathon, Bayer Tree and Shrub/Rose Care)

- Systemic.
- Soil drench/ trunk drench/ injection.
- Highly effective against targeted insects.
- Mammal toxicity is low.
- No exposure to non-targeted insects or plants.
- Remains active in plant for several months.
- Little impact on caterpillars and mites

Treats: Many pests, particularly effective against sucking insects, soil insects, whiteflies, termites, turf insects, and Colorado potato beetle.

Organophosphates*

***Among the most acutely toxic pesticides, most organophosphates are classified by the U.S. Environmental Protection Agency as highly or moderately toxic.* Liquid organophosphates are readily absorbed by all routes.**

Malathion1*, Azinphos-methyl, Dichlorvos (SEE WORD DOC), Dimethoate cygon 2E, Ethephon, Methamidophos, Naled, and Oxydemeton-methyl

- Contact and systemic* pesticide formulas.
- Mammal toxicity varies with chemical form.
- Acts on nervous system
- HIGHLY TOXIC TO BEES
- Used on lawns, shades trees, shrubs,
- Can impact non targeted wild life.
- Lasts a long time in the environment.
- Malathion is the least toxic in this group - only slightly absorbed through the skin.

*Selective systemic organophosphate insecticides are toxic to plant pests but not their predators

Treats: Kills many insects including beneficials.

What are Signal Words?

Signal words are found on pesticide product labels, and they describe the acute (short-term) toxicity of the formulated pesticide product.

CAUTION means the pesticide product is slightly toxic if eaten, absorbed through the skin, inhaled, or it causes slight eye or skin irritation.

WARNING indicates the pesticide product is moderately toxic if eaten, absorbed through the skin, inhaled, or it causes moderate eye or skin irritation.

DANGER means that the pesticide product is highly toxic by at least one route of exposure. It may be corrosive, causing irreversible damage to the skin or eyes. Alternatively, it may be highly toxic if eaten, absorbed through the skin, or inhaled. If this is the case, then the word "POISON" must also be included in red letters on the front panel of the product label.

References and Sources for More Information

Organophosphates:
http://www.michigan.gov/dnr/0,4570,7-153-10370_12150_12220-27249--,00.html
http://www.panna.org/resources/organophosphates

Neonicotinoids:
http://edis.ifas.ufl.edu/pi117,
http://www.ctpa.org/EAB%20Files/Clippings2010.pdf
http://conference.ifas.ufl.edu/gardener10/Presentations10/Emerald%20CDE/Monday/1030%20D%20Corbin.pdf

Microbials:
http://www.clemson.edu/extension/hgic/pests/pesticide/hgic2770.html

Botanicals and other natural products for insect management:
http://edis.ifas.ufl.edu/in197

Signal Words:
http://www.npic.orst.edu/factsheets/signalwords.pdf

UF UNIVERSITY of FLORIDA
IFAS Extension

Marion County FLORIDA

Plant Clinic Guide

UF University of Florida IFAS Extension Marion County Florida

- **Dress Code**
  - Green collared shirts
  - Name tag
- **Sign-In Sheet**
  - One sheet per desk (Name, Date, Shift)
  - Questions and answers
  - Check box for walk-ins
  - Demographic Data
  - Log Book
- **Computer**
  - **Turning on**
  - Initial set up
  - Password rules
  - Reset password
  - Setting up email
  - Set search engine
  - Favorites/Bookmarks
  - Be sure to **Log Off** at the end of your shift
- **Phones**
  - Dial out - #9 plus number
  - In house – extension # only
  - Hold
  - Long distance (toll) calls cannot be dialed.
    - Use phone at reception desk for toll calls
    - Cell phone
  - Answering the phone (see back of sheet)
- **Research**
  - Quick Answer Book
  - Computer
    - Always check UF/IFAS website first
    - Other university websites i.e. GA. Clemson, NC, UC Davis
    - Botanical organizations/societies i.e. American Rose Society
    - Databases i.e.
    - MSDS (Material Safety Data Sheets)
    - Florida Pesticide Product Data Search
    - Favorites (Bookmarks)
    - A to Z files
    - MG reference bookshelf
- **Book Sales**
  - Books on rack
  - Books stored
  - Cash Box/Sales binder
  - Cash or checks only – no credit cards
  - Garden Journals
- **Soil Testing**
  - MG (Extension)
    - PH only
    - Collecting samples – completely dry
    - Forms – date and initial
    - Test dates – 2nd Thursdays
    - Results turnaround – next day with client email
- **Soil (cont'd.)**
  - University of FL Testing (Fees)
    - Types:
      - Nematode
      - Nutrient
    - Mail-in kits
      - Donna has materials
      - Client mails kit to UF
- **Email List** (Clipboard on counter)
- **Informational brochures on wall**
- **Personal Folders** – Storage room
- **Misc.**
  - MGs do not make house calls.
  - MG Business Cards (personal use)
  - All Citrus Samples brought to the Ag Center must be contained in a sealed plastic bag.
  - Citrus Hotline (800-282-5153) for suspected Citrus Greening
  - Qualify any personal suggestions/ solutions for solving problems.
  - Try not to recommend specific product brands.
  - Give information on lawn and landscape care **but do not criticize homeowner's lawn/landscape contracted services company.**

***MGs only serve residential clients.**
Refer to Agents:

Jonael Bosques - Small Farms	**8407**
Mark Shuffit – Horse Farms	**8408**
Norma Samuel – MG HELP!	**8410**
Kathy Patterson – FYN	**8412**
David Holmes – Commercial Businesses (Lawn Services, Nurseries, Pesticide Applicators. Etc.)	**8418**
Nancy Gall – Food Preservation	**8419**

"Good Morning/Afternoon, Master Gardener Plant ClinicThis is: First Name

How may I help you?"

- Take notes:
  - Telephone number from caller ID screen on phone
  - Caller's name if it is given
  - Brief description of problem
- Ask questions. Note answers (Create dialogue).
- Use Quick Answer Book (One on each desk) if appropriate
- If you need time to research an answer:

"I would like to do some additional research. Would you mind if I take your number and call you back?"

- Have caller repeat phone number
- Check Quick Answer Book
- Research UF/IFAS Website
- Other .edu websites (Clemson, U of GA, Stanford U. etc.)
- Reference Book shelf
- A to Z files

Once you have completed research:

- Call client and give information.
- If you have documents from your internet research tell the client:

"If you would like to give me your email address I would be happy to send you the links to some useful websites for further information." (This email is for one time use related only to this call.

Ask the caller if she/he would like to be placed on our email list. If permission is given, record on the email list on the counter.

"Would you like to be placed on our permanent mailing list to receive our monthly newsletter, information on classes, Spring Festival, Master Gardener plants sale and other special events?"

I acknowledge that the information set forth on these pages	Date:_____
was explained to me to my satisfaction.	Print Name:_____
	Signature:_____

Survey Results - 84 Completed

How did you hear about today's sale?

16 (19%)- Marion County UF/IFAS Extension Service Website County Website 19 (23%) - Email Notification
18 (21%) - Star Banner 6 (7%) - Facebook 22 (26%) – Other (word of mouth/friends) 3 (4%) - NA

How far did you travel to attend? 28 (33%) > 10 miles 34 (40%) - 10-20 miles 19 (23%) < 20 miles 3 (4%) - NA

Today I am shopping for the following trees/shrubs/plants:

15 (18%) - Fruit Trees 7 (8%) - Shade Trees 23 (27%) - Ornamental Trees 25 (30%) - Landscape

8 (10%) - Bedding 59 (70%) -Butterfly/Hummingbird/Pollinator 47 (56%) – Perennials 38 (45%) - Natives

What kind of gardener are you? (Check all that apply.)

37 (44%) - I want my landscape to be neat, attractive and low maintenance and accommodate my busy life style.

57 (68%) - I love lots of color and would like to have something blooming for each season.

62 (74%) - I like to see wild life in the yard, including bees, birds and butterflies.

26 (31%) - I would like to know more about native plants.

2 (2%) - Other – 5 ACRES/MOSTLY NATURAL, VEGGIE BEDS/WILDLIFE

Rate today's plant selections:

75 (89%) - Varied/ Interesting 5 (6%) - Not Enough Variety 4 (5%) – NA

Price:

78 (93%) – Reasonable 0 (0%) -High 2 (2%)-Low 4 (5%) -NA

Quality of the plants:

52 (62%) –Excellent 29 (34%) - Good 0 (0%) - Fair 0 (0%) - Poor 3 (4%) - NA

***Please complete both sides of survey.**

Will you plan to attend future Master Gardener plant sales? **77 (92%) - Yes** **0 (0%) - No** **7 (8%) -NA**

If "yes" what plants would you like to see at our Spring Sale next year?

See Below "A"

Additional Comments:

See Below "B"

Please provide your email address if you would like to receive Master Gardener and Marion County UF/IFAS Extension Service information on classes, sales, and special events? 37 EMAIL ADDRESSES COLLECTED

A.

More unusual plants, weeping willow, bottle brush, flowering annuals and hanging baskets, bedding, roses, vegetables, sorrel and gaillardia, African blood lily, ground cover, same, weeping anything, Passion vine, more native hummingbird and pollinator plants, vegetable starts, azaleas, flowering perennials, Mexican flame vine, corky stem passion vine, dill, mimosa, beach sunflower, sweet William, mondo grass. Things that thrive here. I prefer perrenials but I love them all. Sun hardy. Local plants/any. Hummingbird and butterfly plants, drought tolerant. Echinacea. Asiatic Jasmine, Blue Eyed Grass, more natives. Some excellent selections, possibly more herbs. Natives, perennials, low maintenance. Butterfly plants and natives. Lots of natives/talks about propagation. The variety you have is great. Colorful flowers. Azaleas. Bottlebrush, Jasmine. Fruit trees, vegetables, ornamentals. Variety of day lilies. Natives, same selections. More lilies, I missed them. Larger echinacea

B.

This is great. Thanks for your time.

Enjoyed seminar last weekend

Loved the sorrel tea test and the 8 a.m. introductory talk

Just completed landscape class last week so we'll have a visit from Master Gardeners. Will see what they recommend.

Great Resource

Ideally all plants can be labeled. The Master Gardeners are very helpful.

Always I'm thrilled with the selections you have. Cannot beat the prices. It makes it easy for us dummies to make our yards look better. Everyone is most helpful. Thank you for being here and doing this.

Great selections.

Any weeping trees.

Keep up the good work.

Great job.

My first time. It was great.

Your gardeners are so very helpful, especially Bobbi who reall helped in what to plant as we had no clue.

I love this even. I love the variety and the company.

Excellent job.

First plant sale. Loved it – Wish I had come in the past

Survey could be shorter.

Thank you.

More annuals and roses, maybe drift roses.

Love this show.

Great. Keep up the good work.

Excellent way to choose plants for the garden and learn more about flowers that grow well in Marion County

Receipts listing plants I bought- not all plants purchased had name tags in them.

Would like to see better labeling and more info with plants.

Excellent. Thank you.

Always an interesting sale.

Think about selling garden carts.

Marion County Master Gardeners' Spring Festival 2013

Seminar Topic: Composting 13 Evaluations 50+ Attendees

Please check the most appropriate answer	*yes*	*no*	*some*	*none*
Did you gain useful knowledge?	13 (100%)	___	___	___
Would you share this knowledge with others?	12 (92%)	___	1(8%)	___

Any additional comments?

Very Informative/well done;
Very knowledgeable-presented on easy understand(able) format;
Good presentation;
Very good and informative talk, covered everything pretty well. I didn't know much coming in but I feel I learned a lot;
Please repeat questions when asked so all can hear;
She was an informative speaker;
Great;
Repeat question attendee asks as we can't hear-so we don't know what your wonderful answers.

Farm Bureau Legislative Tour 2013 Feedback

I was asked by our extension agent to act as a guide for this year's Marion County Farm Bureau Legislative Tour; the purpose was to educate decision makers on the importance of agriculture in their county/district. Forty three people, including 1 state Senator, 2 state Representatives, 3 County Commissioners participated in the tour through the Master Gardener Demonstration Gardens. Of particular interest was the Empower Ocala Community Garden project where twelve families, identified as living in a food dessert, (an urban area without ready access to healthy, fresh foods) participated in a hands-on vegetable garden project. Information was enthusiastically received and comments from the tour participants were 100% positive.

Master Gardener Training Class - Fall - 2012 Evaluations

1 - Poor 2- Fair 3- Good 4- Very Good 5- Excellent

Telephone Communications – Linda Krausnick/Lis Robson

1	2	3	4	5
		6	2	12

Excellent – 12 (60%) Very Good – 2 (10%) Good – 6 (30%)

Plant Propagation - (Linda Krausnick/Barb Georgius)

1	2	3	4	5
			6	12

Excellent – 12 (67%) Very Good – 6 (33%)

Composting 101 (Linda Krausnick)

1	2	3	4	5
		3	2	13

Excellent – 13 (72%) Very Good – 2 (11%) Good – 3 (17%)

2013 Florida GARDENING 101 (1/28 – 2/1)

PROGRAM EVALUATION SUMMARY - - **Methods of Propagation** (Linda Krausnick/Barb Georgius)

5-Excellent 4-Very Good 3-Good 2-Fair 1 – Poor

Excellent - 18 (62%) Very Good - 9 (31%) Good - 1 (3 1/2%) Fair – 1 (3 ½%) Poor - 0